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UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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*Ex parte* RAYMOND WELLMAN and  
JEFF SHEA

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Appeal 2012-006335  
Application 10/765,707  
Technology Center 1700

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Before BRADLEY R. GARRIS, ADRIENE LEPIANE HANLON, and  
JEFFREY T. SMITH, *Administrative Patent Judges*.

GARRIS, *Administrative Patent Judge*.

DECISION ON APPEAL

Appellants appeal under 35 U.S.C. § 134 from the Examiner's decision rejecting claims 15, 28, 33, 34, 36-54, 57-61, 63-66, 68, and 69. We have jurisdiction under 35 U.S.C. § 6.

We AFFIRM.

Appellants claim a duct assembly comprising a slip collar (10) comprising tubular outer and inner wall portions (12 and 16) having slot regions (24) therebetween, wherein the slot regions contain an adhesive composition and ends of ducts are inserted into the slot regions, wherein the

tubular outer wall portion includes a curved section having apertures with set screws (34) therein, and wherein the thickness of the tubular outer wall portion is between about 3/16-inch to about 1-1/2 inches (independent claim 15; *see also* independent claim 36 and Figs. 1-3). Appellants also claim a duct assembly embodiment wherein the apertures extend inward toward the center of the tubular outer portion (dependent claim 69).

A copy of representative claims 15 and 69, taken from the Claims Appendix of the Appeal Brief, appears below.

15. A duct assembly comprising:

(a) a slip collar comprising (i) a tubular outer wall portion, (ii) a tubular inner wall portion, (iii) an intermediate portion disposed between the tubular outer wall portion and the tubular inner wall portion; (iv) a first slot region defined by the tubular outer wall portion and the tubular inner wall portion, and (v) a second slot region defined by the tubular outer wall portion and the tubular inner wall portion, wherein each of the tubular outer wall portion, the tubular inner wall portion, and the intermediate portion comprises a fiber reinforced plastic material, and wherein the first and second slot regions face away from each other, and wherein the slip collar is an integral, one-piece structure, and wherein the tubular wall outer portion includes a curved section including apertures, and wherein set screws are disposed in the apertures;

(b) a first duct including a first end inserted into the first slot region;  
and

(c) a second duct including a second end inserted into the second slot region,

wherein the first end inserted into the first slot region and the second end inserted into the second slot region each have a constant diameter, and wherein the first and second ducts also comprise a fiber reinforced plastic material;

further comprising a first adhesive composition in the first slot region and a second adhesive composition in the second slot region, and wherein a thickness of the outer wall portion is between about 3/16-inch to about 1-1/2 inches.

69. The duct assembly of claim 36, wherein the apertures extend inward toward the center of the tubular pouter portion.

The Examiner rejects claim 69 under the second paragraph of 35 U.S.C. § 112 as failing to particularly point out and distinctly claim the subject matter which Appellants regard as their invention.

The Examiner's position is expressed as follows:

Where appellant acts as his or her own lexicographer to specifically define a term of a claim contrary to its ordinary meaning, the written description must clearly redefine the claim term and set forth the uncommon definition so as to put one reasonably skilled in the art on notice that the applicant intended to so redefine that claim term. *Process Control Corp. v. HydReclaim Corp.*, 190 F.3d 1350, 1357, 52 USPQ2d 1029, 1033 (Fed. Cir. 1999). The term "aperture" in claim 69 is used by the claim to mean "a hole that is capable of extending inward" which suggests the hole has sidewalls that intrude, while the accepted meaning is "a hole." The term is indefinite because the specification does not clearly redefine the term.

(Ans. 5).

In support of their position that claim 69 is definite to a person having ordinary skill in the art, Appellants point out that "Figure 1 illustrates an embodiment wherein 'the apertures extend inward toward the center of the tubular outer portion' [as recited in claim 69]" (App. Br. 7). Appellants argue "[o]ne having skill in this art . . . would recognize that the set screws 34 are inserted into 'apertures' that 'extend inward toward the center of the tubular outer portion' [as claimed]" (*id.* at 8). Further, Appellants explain that, "[w]hen an aperture or hole is made in the tubular outer wall portion, 'sidewalls'—as used by the Examiner—are naturally formed" (*id.*).

Appellants' argument is persuasive. As correctly indicated by Appellants, one with ordinary skill in this art would understand with a reasonable degree of particularity and distinctness the meaning and scope of claim 69.

The § 112, second paragraph, rejection of claim 69 is not sustained.

Under 35 U.S.C. § 103(a), the Examiner rejects claims 15, 28, 33, 34, 36-39, 41-54, 57-61, 63-66, 68, and 69 as unpatentable over van Vliet (U.S. 4,099,749, patented Jul. 11, 1978) in view of Wellman et al. (US Patent Publication No. 2002/0017333 A1, published Feb. 14, 2002 (Wellman)), Jacobson et al. (U.S. 6,213,522 B1, patented Apr. 10, 2002 (Jacobson)), Thomas (U.S. 4,699,177, patented Oct. 13, 1987), and Williams et al. (U.S. 5,961,154, patented Oct. 5, 1999 (Williams)) and rejects claim 40 as unpatentable over these references and further in view of Nishio (U.S. 6,045,164, patented Apr. 4, 2000).

In contesting these rejections, Appellants present arguments directed to claims 15, 36, 40, 66, and 69 specifically (App. Br. 7). The remaining claims under rejection (i.e., the remaining dependent claims on appeal) will stand or fall with their specifically argued parent claims.

We will sustain the Examiner's § 103 rejections for the reasons expressed in the Answer and below.

Concerning the independent claims (i.e., claims 15 and 36), the Examiner concludes that it would have been prima facie obvious to provide the slip collar and duct assembly of van Vliet with (1) a fiber reinforced plastic material of construction and a slip collar outer wall thickness adequate for the needed structural strength in view of Wellman (Ans. 7), (2)

apertures and screws in the curved slip collar/duct connection of van Vliet's assembly to obtain additional connection-strength in view of Jacobson (*id.* at 8), (3) wherein set screws specifically are used for the apertures and an adhesive is used for the connection of van Vliet's assembly in view of Thomas (*id.*), and (4) wherein the adhesive is used in the slot regions specifically of the assembly in view of Williams (*id.* at 9).

Appellants believe that the number of references applied in the above rejections indicates the Examiner has used improper hindsight in rejecting the appealed claims (*see, e.g.*, App. Br. 9, 26). This belief is erroneous for the reasons given by the Examiner (*see, e.g.*, Ans. para. bridging 15-16 citing *In re Gorman*, 933 F.2d 982 (Fed. Cir. 1991)). We observe that Appellants have not responded to the Examiner's reasons including the *Gorman* citation.

Appellants argue that the Examiner has failed to establish a prima facie case of obviousness because: the proposed combination ignores van Vliet's desire for a less complicated connection (App. Br. 11); Jacobson's teaching of using apertures and screws is not specific to the curved section of an outer wall portion as claimed (*id.* at 12-13); the reference teachings of using adhesive for connection purposes do not specifically teach applying the adhesive in slot regions as claimed (*id.* at 13-17); and, the wall thickness taught by Wellman relates to the outer wall of a duct rather than the outer wall of a slip collar (*id.* at 17-18).

Appellants' arguments lack persuasive merit.

We perceive no compelling reason why van Vliet's desire for a less complicated connection would militate against the obviousness of

predictably using prior art elements such as apertures, screws, and adhesive according to their established connection-achieving functions. *See KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 417 (2007) (in assessing the obviousness of a claim to a combination of prior art elements, the question to be asked is "whether the improvement is more than the predictable use of prior art elements according to their established functions").

We also do not agree with Appellants that *prima facie* obviousness is undermined by the fact that the references do not teach using apertures with screws or an adhesive in the specific locations defined by the independent claims. "A person of ordinary skill is also a person of ordinary creativity, not an automaton." *Id.*, 550 U.S. at 421. Therefore, such a person would use apertures with screws and an adhesive at the connection locations of van Vliet's slip collar and duct assembly, which correspond to the locations claimed by Appellants.

Finally, the fact that Wellman's thickness relates to a duct wall rather than a slip collar wall does not reveal error the Examiner's conclusion that it would have been *prima facie* obvious to provide the outer wall of van Vliet's slip collar with a structurally adequate thickness.

Appellants' arguments regarding dependent claims 40 and 69 (i.e., relating to the number of applied references and Jacobson's teaching of apertures with screws not being specific to the claimed tubular outer portion) (App. Br. 26-27) are not convincing for reasons discussed previously.

We also find no convincing merit in Appellants' argument that Jacobson is silent about using screws "while the first adhesive composition disposed in the first slot region cures" as recited in dependent claim 66 (*id.*

at 27). An artisan would have found it prima facie obvious to use screws for their established connection purpose before, during, or after adhesive curing. Moreover, as correctly explained by the Examiner, the claim language in question is product-by-process recitation which limits the claim only if the claimed product is structurally distinct from the prior art (Ans. 22). Here, regardless of whether the prior art screws were used before, during, or after adhesive curing, the resulting structure would be indistinguishable from the claim 66 assembly, and Appellants do not argue otherwise.

For the reasons given above and in the Answer, the Examiner has established a prima facie case of obviousness for the subject matter defined by the argued claims.

Appellants contend that any prima facie case of obviousness is overcome by Declarations under 37 C.F.R. § 1.132 by Jeff Shea filed 28 June 2007 (the first Shea Declaration) and filed 29 October 2007 (the second Shea Declaration) and by Joseph Plecnik filed 1 March 2006 (the Plecnik Declaration) (App. Br. 18)<sup>1</sup>. These Declarations are said to show commercial success, nonobvious advantages, and long felt need (*id.*).

According to Appellants, the first and second Shea Declarations show commercial success as evidenced by increasing sales of the H-Collar<sup>TM</sup> line of joint products (*id.* at 18-21).

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<sup>1</sup> Appellants have failed to list and provide copies of these Declarations in the Evidence Appendix of their Appeal Brief and therefore have failed to comply with the requirements of 37 C.F.R. § 41.37(c)(1)(ix). Notwithstanding Appellants' failure, we have obtained and reviewed copies of these Declarations in order to fully resolve the issues raised by this appeal.

However, we agree with the Examiner that the Shea Declarations do not identify any specific claim features which are possessed by the sold products and which are considered to be responsible for the commercial success of these products (Ans. para. bridging 18-19 quoting from paragraph 5 of the first Shea Declaration which vaguely states "many of the features recited in the claims are responsible for the commercial success of the product"). Because the Shea Declarations do not establish that the success of these products is due to the claimed invention, Appellants have failed to show nonobviousness in the form of commercial success. *See Geo. M. Martin Co. v. Alliance Machine Systems Int'l LLC*, 618 F.3d 1294, 1304 (Fed. Cir. 2010) ("The commercial success of a product is relevant to the non-obviousness of a claim only insofar as the success of the product is due to the claimed invention."). Further, the commercial success of the newer H-Collar<sup>TM</sup> products is suspect because the modest sales increase appears to be at the expense of a dramatic decrease in sales of older products (*see* the second Shea Declaration para. 6, Chart A).

Appellants state that each of the above Declarations evidences nonobvious advantages such as more efficient and less costly duct assembly procedures (App. Br. 21-24).

We again agree with the Examiner that the Declarations fail to show such advantages are due to the claimed invention (Ans. 19-20). In addition, the Declarations characterize these advantages as relative to the applied secondary reference to Williams (*see, e.g.*, Plecnik Declaration para. 7, first Shea Declaration para. 6, second Shea Declaration para. 7). The applied primary reference to van Vliet is not only closer prior art but also discloses

the same advantages described in the Declarations (*see, e.g.*, col. 1, ll. 12-16 ("My invention . . . is less time consuming and less complicated in comparison with the known connection methods.")). For these reasons, the Declarations do not show advantages compared to the closest prior art which would have been unexpected to an artisan familiar with van Vliet.

Finally, Appellants state that "paragraph 7 of the First Shea Declaration provides evidence of a long felt need for duct joint products, such as H-Collar<sup>TM</sup> joint products, embodying the claimed invention" (App. Br. 25).

As correctly indicated by the Examiner, Appellants have failed to establish that the H-Collar<sup>TM</sup> products include the appealed claim features and concomitantly that the claimed duct assembly satisfies a long felt need (Ans. 20). Furthermore, the need identified in the first Shea Declaration for a more efficient and less costly installation procedure appears to have been satisfied by van Vliet (*see again* col. 1, ll. 12-16). *See Geo. M. Martin Co.*, 618 F.3d at 1304-05 (stating that the evidence of long felt need was not convincing because "[t]he record shows . . . this 'need' had been met by prior art machines").

For the reasons stated above and in the Answer, the argument and evidence of record on balance weighs most heavily in favor of an ultimate conclusion that the subject matter defined by the argued claims on appeal would have been obvious to one having ordinary skill in this art. We sustain, therefore, each of the § 103 rejections before us.

The decision of the Examiner is affirmed.

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Application 10/765,707

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a).

AFFIRMED

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